

CERRO COPPER PRODUCTS CO.

A member of The Marmon Group of companies

INTERNAL MEMORANDUM

OTHER ADDRESSEES - FOR INFORMATION

1104

153834

HQ-10

SHOW NAME, TITLE AND UNIT OF ADDRESSEE AND ADDRESSOR

TO: Paul Tandler ✓

DATE: January 11, 1984

FROM: Sandy Silverstein

SUBJECT: Waste Treatment Charges

The drop in total billings for 1983 compared to 1982, as pointed out in your January 6 memo, is undoubtedly due to the start-up of the anode cooling water system this past summer. From June through December there was a dramatic drop in the volume discharged and even though there was an increase in December due to the number of bleeder lines opened for freeze protection, the volume for December was still less than half the average of the first five months of 1983. This drop is distorted when comparing only our percentage contribution to the total village discharge since that figure fluctuates widely from month to month.

A valid analysis of charges for acidity, oil and sludge cannot be made due to the fact that, for six of the twelve months in 1983, our contribution was an estimated figure. A failure of the sample pump on the Cerro East lift station was the reason for the estimated billings and most of our contributions in these three parameters come from the Cerro East discharge. Whatever basis the Treatment Plant uses for determining estimated billings certainly does not take into consideration the changes that were brought about by the new anode cooling water system. Offsetting this is the fact that during the period of estimated billings we emptied the pond and discharged a sizable slug of sludge to the sewers.

The sample pump is now operating and hopefully there will be no more estimated billings. Around the middle of this year we should have enough data to obtain a realistic picture of the actual reduction in charges that can be attributed to the new anode cooling water system. There are good indications that the total savings will compare favorably with the projections presented in the AFE.



SAS/jpl

NOT THIS DATE: TALK GROUP APPROXIMATE TO REVIEW
1983 DATA AS WORK AS QUANTITATIVE RESULTS IN 1984.
SANDY - JOHN SCHWARTZ - R.E.C. TO ADVISE.

C03660

46

LBS.
M Gm. CaO lbs. M lbs.

| | | 1 | 2 | 3 | 4 | 5 |
|----|-----|---------------------------------------|-------------------------------------|--------------------------------------|--|---|
| | | VOLUME | ACIDITY | OIL | SLUDGE | |
| 1 | JAN | 25.6 ^{9.9} _{15.7} W | .63 ⁰ _{0.63} E | 7.43 ^{3.0} _{4.0} E | 149 ^{17.5} ₁₃₁ E | |
| 2 | | .1188 | .0156 | .0055 | .3506 | |
| 3 | | | | | | |
| 4 | FEB | 28.5 ^{14.9} _{13.0} | .46 ⁰ _{.46} | 9.38 ^{3.3} _{6.0} | 1325 ^{35.6} _{101.9} | |
| 5 | | .1357 | .0096 | .0692 | .2955 | |
| 6 | | | | | | |
| 7 | MAR | 23.3 ^{11.6} _{11.6} | .023 ⁰ _{.023} | 13.7 ^{2.9} _{10.8} | 134.6 ^{62.8} _{71.8} | |
| 8 | | .0984 | .0003 | .0741 | .2664 | |
| 9 | | | | | | |
| 10 | APR | 24.1 ^{10.2} _{13.9} | .159 ⁰ _{.159} | 23.0 ^{5.8} _{17.2} | 1034 ^{26.6} _{76.7} | |
| 11 | | .0848 | .0048 | .1274 | .1905 | |
| 12 | | | | | | |
| 13 | MAY | 22.5 ^{9.7} _{12.8} | .509 ⁰ _{.509} | 16.5 ^{3.7} _{12.8} | 122.2 ^{12.1} _{110.1} | |
| 14 | | .0921 | .0111 | .2097 | .2850 | |
| 15 | | | | | | |
| 16 | JUN | 16.0 ^{7.4} _{8.6} | .354 ⁰ _{.354} | 19.6 ^{2.8} _{16.7} | 1339 ^{14.8} _{119.0} | |
| 17 | | .0510 | .0083 | .2150 | .1816 | |
| 18 | | | | | | |
| 19 | JUL | 22.1 ^{14.9} _{7.2} | .296 ⁰ _{.296} | 17.5 ^{4.5} _{13.1} | 118.1 ^{35.7} _{82.4} | |
| 20 | | .0693 | .0044 | .1135 | .2011 | |
| 21 | | | | | | |
| 22 | AUG | 17.2 ^{11.9} _{5.3} | .933 ⁰ _{.933} | 16.2 ^{5.6} _{10.6} | 116.2 ^{20.8} _{95.4} | |
| 23 | | .0707 | .0437 | .1549 | .2742 | |
| 24 | | | | | | |
| 25 | SEP | 13.2 ^{6.5} _{6.8} | .338 ⁰ _{.338} | 23.6 ^{2.0} _{21.6} | 82.4 ^{15.2} _{67.1} | |
| 26 | | .0486 | .0092 | .2289 | .2159 | |
| 27 | | | | | | |
| 28 | OCT | 12.7 ^{6.6} _{6.1} | .778 ⁰ _{.778} | 23.6 ^{1.8} _{21.8} | 99.7 ^{12.8} _{87.0} | |
| 29 | | .0694 | .0212 | .1403 | .2094 | |
| 30 | | | | | | |
| 31 | NOV | 9.4 ^{3.2} _{6.2} | .294 ⁰ _{.294} | 22.9 ^{16.2} _{22.2} | 93.9 ^{5.2} _{88.7} | |
| 32 | | .0509 | .0233 | .2960 | .3135 | |
| 33 | | | | | | |
| 34 | DEC | 14.2 ^{4.6} _{9.6} | 1.223 ⁰ _{1.223} | 18.4 ⁵ ₁₈ | 93.7 ^{3.7} ₉₀ | |
| 35 | | .0694 | .0677 | .3308 | .2856 | |
| 36 | | | | | | |
| 37 | | | | | | |
| 38 | | | | | | |
| 39 | | | | | | |
| 40 | | | | | | |

C03661

CERRO COPPER PRODUCTS CO.

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INTERNAL MEMORANDUM

HQ-10

SHOW NAME, TITLE AND UNIT OF ADDRESSEE AND ADDRESSOR

OTHER ADDRESSEES - FOR INFORMATION

cc: R. E. Conreaux
J. Schuster
File 1104

TO: S. A. Silverstein

DATE: January 6, 1984

FROM: Paul Tandler

SUBJECT: SAUGET WTP CHARGE DISTRIBUTION

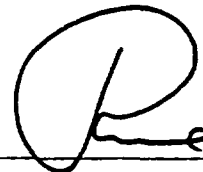
A review of our 1983 billings reveals the following, as seen in the attached tabulation:

1. Our total billings for O & M were \$86,000 below 1982. That's good.
2. Our flow and sludge share has declined, but the latter seems on the rise again in November-December. That's good news and bad news.
3. Our acidity (ph control) share is on the rise in the second half of the year. That's bad.
4. Our oil share is up and down, but mostly up. That's bad too.

Our "share" is of course affected by the volumes generated by others, and if they improve - and we do not - our share goes up.

Since you receive monthly reports of actual quantities attributed to Cerro and others, a more meaningful comparison and analysis might be in order so that we can better deal with such controllable factors as oil and ph.

Please let me have your thoughts.



PT/ge

Attachment

C03662

| <u>1983</u> | <u>FLOW</u> | <u>ACIDITY</u> | <u>OIL</u> | <u>SLUDGE</u> |
|-------------|-------------|----------------|------------|---------------|
| Jan. | .119 | .0156 | .0655 | .351 |
| Feb. | .136 | .0096 | .0692 | .296 |
| Mar. | .098 | .0003 | .0741 | .268 |
| Apr. | .085 | .0048 | .1274 | .191 |
| May | .092 | .0111 | .2097 | .285 |
| June | .051 | .0083 | .2150 | .182 |
| July | .060 | .0044 | .1135 | .201 |
| Aug. | .071 | .0437 | .1549 | .274 |
| Sept. | .049 | .0092 | .2289 | .216 |
| Oct. | .060 | .0212 | .1403 | .209 |
| Nov. | .051 | .0233 | .2960 | .314 |
| Dec. | .069 | .0677 | .3308 | .284 |
| | <hr/> | <hr/> | <hr/> | <hr/> |
| YEAR | .0766 | .0144 | .1463 | .2473 |

47,000 lbs. Cu/Yr. Copper loss

ESTIM. 240,000,000 ~~grams~~ / Yr.

2000 x ~~10⁶~~

$$\frac{47,000}{2000} = 24 \text{ PPM}$$